This report summaries achievement, challenges and the way forward for the WHO South Sudan activities covering the period October – December 2011. It focuses on 10 programme areas.
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1.0 Background

1.1 The general context in the Republic of South Sudan.

In July 2011, the Republic of South Sudan (RSS) gained its independence becoming the newest country in the world bringing to an end six years Comprehensive Peace Agreement (CPA) interim period signed in 2005. But despite gaining independence and the achievements that the country recorded during the CPA period including the census, presidential and parliamentarian elections, self-determination referendum to the independence celebration, the newest county continues to face a lot of pressing humanitarian challenges. With the enormous challenges, the RSS still needs support of the international community to overcome them by becoming more peaceful and secure in order to meet the demands of its people.

The overall humanitarian situation in South Sudan continued deteriorating in the past few months with increased tribal clashes, unresolved border disputes between South Sudan and Sudan, Abyei crisis, continuous bombardment of a refugee area in Upper Nile State’s Maban County, refugee crisis in Unity and Upper Nile states, and active rebel militia movements in Jonglei, Upper Nile and Unity states.

In 2011, South Sudan experienced the largest population movement since the signing of the comprehensive peace agreement in 2005. With over 330,000 civilians internally displaced, 350,000 South Sudanese returned from Sudan, 110,000 people displaced from Abyei, and additional 100,000 refugees fleeing into South Sudan from Southern Kordofan and Blue Nile states, these currently living in camps in Unity and Upper Nile. This made the humanitarian situation in the country during this quarter precarious hence impacting on the existing weak health systems and increasing vulnerability in the remote and inaccessible areas in the country. To respond to the myriads of the situations highlighted above, WHO continued to support and complement the RSS efforts in meeting the South Sudan National Health Policy (MOH/GoSS 2006) objectives. Technical and financial support was provided to the Government of the RSS and the states to implement key focused life saving health interventions while advocating for more attention and funding for the country. Together with the MoH/RSS, the organization participated in Joint Assessments in states affected by different emergencies.

1.2 The Current situation in the states
The fourth quarter presented many challenges that shaped WHO's work in the RSS. Key among these challenges was the inter-tribal clashes and cattle raids that left thousands of people injured, displaced or dead in the states of Jonglei. These brought with them an increase in health problems/needs which further stretched the health partners’ capacity to respond to the humanitarian crisis and increased pressure on the already compromised health system and poor staffing levels. The concentrations of the population in confined settings compounded the already dire state of poor sanitation and lack of safe drinking water & sanitation facilities in the settlement area, predisposing the displaced people and returnees to outbreaks of water borne diseases. The repeated sporadic tribal clashes in high risk states like Jonglei, Warrap, Unity, Lakes and Upper Nile also posed a threat to the health system.

During the fourth quarter, WHO participated in the NHSP inception training organized for staff from South Sudan and Sudan. The training that was organized and facilitated by EMRO and HQ was aimed at enhancing better communication, effective advocacy and negotiation skills for WHO staff members. The workshop discussed global and regional issues in the health sector and the major challenges facing country health systems. It also emphasized WHO core values that should influence health policies, strategies and plans and guide dialogue at every decision made in the WHO country office. The workshop was held in two phases. One in Khartoum for the WHO Sudan and South Sudan staff based at the Juba level and another held at Juba for staff based at the field offices.
2.0 WHO's Major Achievements in the 4th quarter. (October to December) 2011

2.1 Emergency Humanitarian Action (EHA)

The strategic objective of the EHA unit is to reduce the health consequences of emergencies, disasters, crisis and conflicts and minimize their social and economic impacts.

The overall humanitarian situation in South Sudan continued to deteriorate during this quarter with increased tribal clashes, unresolved border disputes between the South Sudan and Sudan, the Abyei crisis, continuous bombardment of Unity and Upper Nile State, the refugee Influx in Unity and Upper Nile states, and active rebel militia movements in Jonglei, Upper Nile and Unity states. During the last quarter of 2011, South Sudan experienced the largest population movement since the signing of the comprehensive peace agreement. To date over 330,000 civilians are internally displaced and over 350,000 South Sudanese have returned from North Sudan. One hundred and thirty thousand people were also displaced from Abyei, and additional 54,000 refugees who fled into South Sudan from Southern Kordofan and Blue Nile states are currently living in camps in Unity and Upper Nile.

During the quarter, WHO continued to support the Ministry of health at national and sub national level in the areas of health assessments, filling in critical gaps, strengthening local capacities and coordinating health and humanitarian action.

a) Emergency Health and Humanitarian Coordination

In this quarter, WHO maintained its support and provided leadership to the health partners (UN agencies, NGOs, Civil societies and MOH) in emergency and crisis preparedness focusing on the national and sub national levels. Orientation for the emergency and preparedness committees were conducted at all levels tasked with coordination of health emergency responses. In particular WHO revitalized and supported the health coordination task force in Malakal during the Maban and Renk responses. The task force met regularly to deliberate on key issues and challenges faced in working with partners during emergency responses in the greater Upper Nile state. Key areas supported and strengthened included; conducting of periodic assessments in Renk and Maban counties, coordination, distribution and prepositioning of emergency medical supplies and deployment of key human resources to provide technical support to the frontline health workers offering emergency health services.

b) Emergency Health Assessments and Needs Assessment

WHO supported a series of rapid health assessments to identify health gaps and develop strategies to effectively respond to health needs in Northern Bhar el Ghazal state. Among the assessments conducted and supported by WHO in collaboration with other cluster partners are; the Inter agency assessment in Maban county following the influx of people from South Kordofan following fighting there, Interagency assessment in Pigi Korfuls in northern Jonglei state, Interagency assessment in Renk for the
influx of returnees and two assessments in New Fangak to verify reports of a suspected outbreak. Other assessments were; an interagency assessment to Agok to assess the accessibility of health services by the displaced population and an assessment of the level of preparedness of the state ministry of health in Unity, Upper Nile and Warrap states.

The programme also conducted support supervision visits to the states of Unity, Jonglei Upper Nile, Lakes, Western Bahr el Ghazal, and Warrap as a follow-up of the preparedness and response activities with emphasis on improving the quality of emergency responses. The technical officers visited the counties of Agok, Maban, Yida, Renk, Atar, and pigi, New Fangak, Turalei and Yirol among others. Supervision in the following areas were conducted: logistics management and storage space for emergency supplies at the state level, participation and visibility during assessments and the identification of national public health officers who can potentially be recruited and posted at state level.

To further strengthen its activities in the Agok area where over 110,000 people are in need of humanitarian response, WHO supported the deployment of a technical officer to oversee the organizations’ supported activities in the Abyei Administration Area.

c) Technical support during emergencies

WHO in partnership with the Ministry of Health (MoH) Republic of South Sudan supported and actively addressed the health emergency needs for returnees and the vulnerable population from North Sudan. The programme also supported the ministry of health to develop guidelines for the management and provision of health services in the refugee settings and areas with high returnees and IDPS. Technical guidelines and treatment guidelines were distributed to health partners that were involved in the provision of primary health care services to the population in areas harboring returnees. The program also supported surge capacity and deployment of MOH health workers to Warrap, Unity, Jonglei and EES states, as a result the coordination of health responses, information management and prompt verification of potential outbreaks were achieved. WHO further supported three trainings for health workers on case management of measles and implementation of case based surveillance for measles.

WHO maintained her presence in the ten states, as a result technical officers provided guidance on the initiation of mobile clinics, establishment of static and fixed immunization services, triage of patients, disease surveillance activities, clinical management of patients and health education services. As part of its mandate to strengthen humanitarian coordination and health emergency responses, WHO identified and recruited national emergency public health officers for Unity and Jonglei states. These among others, are six high risk states prone to emergencies and border with Sudan; this was aimed at improving supervision, visibility and rapid response in the area of assessments so that
critical gaps in emergencies are documented and their impact on the health sector minimized.

d) Strengthening local capacities for response and emergency preparedness

WHO supported the MOH to conduct a number of training activities aimed at strengthening the capacity of the critical health work force involved in responding to emergencies. These health workers required skills in emergency management to enable them respond appropriately and timely to health emergencies in their respective states. With support from CERF funds, the programme managed to conduct a total of 10 trainings in six high risk emergency states. In four states, trainings of health workers and community opinion leaders on communication of health risks in emergencies was conducted, as a result, participants developed preparedness work plans and emergency budgets to support disease outbreak and risk communication in their counties. Six trainings focused on the management of Cholera and other diarrhea diseases in concentrated populations. The principals of management of cholera, disease surveillance, and post outbreak coordination activities were underscored. In order to build resilient communities for the management of disasters and to strengthen emergency preparedness, health workers and community leader were trained in management of public health risks in emergencies in Warrap state under the joint peace project. A total of 365 health workers were trained in the areas of communication, disease surveillance and communicable disease control. The table below shows dates and areas for which different trainings were conducted.

<table>
<thead>
<tr>
<th>Training</th>
<th>District</th>
<th>Date</th>
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<tbody>
<tr>
<td>Training of change agents in communication in health risks in Outbreaks</td>
<td>Malakal</td>
<td>16-20th Nov</td>
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<tr>
<td>Training of change agents in communication in health risks in Outbreaks</td>
<td>Warrap</td>
<td>14-17th Nov</td>
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<tr>
<td>Training of change agents in communication in health risks in Outbreaks</td>
<td>NGBZ</td>
<td>21-24th Nov</td>
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<tr>
<td>Training of change agents in communication in health risks in Outbreaks</td>
<td>Rebulton,Unity</td>
<td>27-30th Nov</td>
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<tr>
<td>Management of Diarrhea and Cholera in Humanitarian Populations</td>
<td>Warrap</td>
<td>9-11th Nov</td>
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<tr>
<td>Training of health workers in GW surveillance</td>
<td>WAAU</td>
<td>28-30th Oct</td>
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<tr>
<td>Training of health workers on management in selected public health risks</td>
<td>Tonj North</td>
<td>14th-16th Oct</td>
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<tr>
<td>Training of health workers on management in selected public health risks</td>
<td>Agok Area</td>
<td>28-30th Oct</td>
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<tr>
<td>Training of health workers on management in common illnesses</td>
<td>Awerial</td>
<td>1-4th Dec</td>
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<td>Management of Diarrhea and Cholera in Humanitarian Populations</td>
<td>NGBZ</td>
<td>14-17th Nov</td>
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<td>Management of Diarrhea and Cholera in Humanitarian Populations</td>
<td>WBGZ</td>
<td>21-23rd Nov</td>
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<tr>
<td>Management of Diarrhea and Cholera in Humanitarian Populations</td>
<td>Upper Nile</td>
<td>33-9-11th Dec</td>
</tr>
<tr>
<td>Management of Diarrhea and Cholera in Humanitarian Populations</td>
<td>Unity</td>
<td>24-18-20th Dec</td>
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e) Filling in critical gaps

This is one of the core functions of WHO in humanitarian emergencies. To minimize response time and mitigate the effects of emergencies, the programme prepositioned adequate stocks of supplies to all the ten states. On top of the regular prepositioning the organization responded to emergencies by promptly airlifting and distributing emergency kits in time of crisis. Ten (10) kits were distributed to various states through the SMOH while 4 others were supplied to Warrap,Unity,Jonglei,Uppernile and Central Equatoria to support health partners. These states are frontline states due to the frequency of outbreaks and emergencies that they report. The kits supplied were very critical in the management of common illnesses in the populations that were displaced. In Addition WHO back stopped partners (MSF) with antimalarial drugs to enable them respond to the number of increasing malaria cases in Maban. WHO further provided THESO with IEHK and DDK to strengthen the management of PHC services in Unity. CARE international in Unity also received support from the WHO state office.
f) Improving access to emergency health and primary health care services

During this period, WHO/EHA supported the MOH to enhance routine coverage of immunization by ensuring all children under the age of five (returnees and refugees) are targeted and receive measles vaccine. The support was directed towards the states that reported high number of returns, displacement and refugees. As a result 449 263 children were immunized in the states of Jonglei and Lakes. This follow up campaign was supported using the CERF grant. Similarly in Yida and Maban, new arrivals were targeted and the SMOH teams ensured that all children below the age of nine were vaccinated for measles. WHO in collaboration with implementing partners extended services to areas that had limited access to health services through support to clinics and carrying out of outreaches for management of common illnesses. The areas where the outreaches took place included; Mina camp in Renk County, Yida camp in Pariang County, Adapa camp in Awiel center, Mile Five in Wau county, Ngorom refugee camp in Juba county, nyang and Nyirol way stations among others reaching 104 406 people. In Yida refugee’s camp, 48% of all consultations seen in the Out Patients Department were malaria cases, while Acute Respiratory Tract Infections (ARTI) accounted for 24%. Of the cases seen 38% were children below the age of five.

In Ngorom refugee camp, ARTI accounted for 23.6% of all consultations seen in the Out Patients Department, Malaria 17.6% and Acute Watery Diarrhea accounted for 12.6%.

Challenges

- Storage space at the sub national offices is still limited
- Ownership of the humanitarian and emergency responses by the SMoH is still at a major concern
- Accessibility and security concerns are a hindrance to respond activities.

The pie chart and graph below show cases treated in Renk.
2.2 Health Cluster Coordination

The Health Cluster remained a strong platform for humanitarian partners to come together and determine timely emergency response as well as develop strategies for 2012.

a) Health Cluster Functioning

Monthly Health Cluster meetings were conducted in all the 10 states with the Ministry of Health and State Ministries of Health as the Lead and WHO as Co-Lead. At a national level, four meetings were conducted and emergency meetings conducted where urgent humanitarian situations arose; Upper State continued with its Emergency Health Cluster Task Force which met weekly to address the multiple issues being faced. It was seen that during 2012 over 95 health partners had participated in Health Cluster meetings both at the central or state level, and at national level an average of 25 partners attended each meeting.

List of partners who attended health cluster meetings

| Partners working with cluster at state or central level as of 2012: Ministry of Health and all State Ministries of Health, AAPH, Across, ACPA, AMREF,ARC, Anglican All Association (AAG), AVS, BBAC, CARE, Carter Centre, CIH, Central Equatoria, CIH, Eastern Equatoria, Cambus, CARE, COM, CEFA, CISP, CNIH, CMHB, Concern Worldwide, COSU, CP, CRAD, CS, CUAM, DAE, DeFoss, Diakore, Diocese of Malakal, Diocese Germany, Doctors with Africa, ECO, EDS Mynie Disease, EDS Nams Disease, EDS of Rubola, EDS of Hepatitis, GOAL, Handicap International, HealthNet TP, IMA, ICT, International Aid Services, IOM, IRC, John Doe, Foundation, International Relief, International Association, John Snow Inc, ICT, Malaria Consortium, Maltese International, Marie Stopes International, Massachusetts General Hospital, May Day, Merlin, MSF, MSF, NCSA, Netherlands Red Cross, NWRF, NHI, NNP, NPA, Oxfam, Polish Centre for International Aid, PS, Relief International, Samaritans' Purse, Save the Children in South Sudan, Servant's Heart, Sign of Hope, South Sudan Red Cross, SSAC, SSIM, SUAD, Sudan Medical Relief (Dr. J), SULAY, Tearfund, THEDO, UNHCR, UNICEF, UNFPA, UNICEF, UNWRA, WHO, World Vision International, WHO. | Partners working with cluster at central level as of 2012: Ministry of Health and all State Ministries of Health, AAPH, Across, ACPA, AMREF, ARC, Anglican All Association (AAG), AVS, BBAC, CARE, Carter Centre, CIH, Central Equatoria, CIH, Eastern Equatoria, Cambus, CARE, COM, CEFA, CISP, CNPA, Concern Worldwide, COSU, CP, CRAD, CS, CUAM, DAE, DeFoss, Diakore, Diocese of Malakal, Diocese Germany, Doctors with Africa, ECO, EDS Mynie Disease, EDS Nams Disease, EDS of Rubola, EDS of Hepatitis, GOAL, Handicap International, HealthNet TP, IMA, ICT, International Aid Services, IOM, IRC, John Doe, Foundation, International Relief, International Association, John Snow Inc, ICT, Malaria Consortium, Maltese International, Marie Stopes International, Massachusetts General Hospital, May Day, Merlin, MSF, MSF, NCSA, Netherlands Red Cross, NWRF, NHI, NNP, NPA, Oxfam, Polish Centre for International Aid, PS, Relief International, Samaritans’ Purse, Save the Children in South Sudan, Servant’s Heart, Sign of Hope, South Sudan Red Cross, SSAC, SSIM, SUAD, Sudan Medical Relief (Dr. J), SULAY, Tearfund, THEDO, UNHCR, UNICEF, UNFPA, UNICEF, UNWRA, WHO, World Vision International, WHO. |

The last quarter in 2011 saw deterioration in the humanitarian situation in South Sudan. Fragile health systems caused a national stock out of antimalarials throughout the country, inter tribal fighting, increase in returnees, refugees plus insecurity caused significant impact upon the population. As such the Health Cluster was highly engaged and mobilized multiple partners at county, state and national level together with the Ministry of Health to deliver a coherent health response.

c) Malaria Emergency

An upsurge in malaria cases during the third quarter caused a national stock out of anti-malarial drugs. The Ministry of Health together with WHO, PSI and donors came together to mobilise 800,000 doses of anti-malarials. To facilitate quick distribution the Health Cluster mobilized partners including OCHA and UNMISS to assist in the central and State Ministries of Health. In coordination with the Health Cluster, MSF and WHO assisted in the transportation of drugs to state level, and all State Health Clusters in collaboration with health partners and UNMISS were able to deliver drugs to health facilities in the affected counties.
Map showing humanitarian issues faced between October to December 2011*

d) Refugee Influx

In November, insecurity and bombing in Maban, Upper Nile County caused an influx of over 50,000 refugees as well as 15,000 returnees. In the immediate bombing 29 patients were received of which 10 were medevac ed to Malakal for surgical interventions. In the 15 county health facilities 7 were seeing more than double the normal patient attendance rate and significant strain was put on the county health system. As a consequence the Health Cluster at state and national level mobilized partners in collaboration with UNHCR to ensure that health needs across the county, and not simply within the refugee camps, were being addressed. Strong coordination between County and State Ministry of Health and ICRC, MSF, GOAL, Samaritan’s Purse, Relief International, MRDO, SIM, UNICEF, UNFPA, UNHCR was facilitated by the Health Cluster coordination through the Upper Nile Health Cluster Emergency Task Force as well as the national cluster.

Deterioration in security in northern Unity raised concerns for the well being of 20,000 refugees who entered South Sudan at July 2011. The Health Cluster at both state and national level continued to support UNHCR in its response, maintaining crucial coordination with county, state and national Ministry of Health and health partners, as well as mobilizing resources as necessary.

e) Militia attacks and inter-tribal conflict

Intermittent attacks by rebel militia groups in various parts of the country caused the Health Cluster to mobilize partners and respond quickly. Violent clashes in Mayom County, Unity in October caused 55 fatalities, population displacement and 45 medical evacuations to Bentiu for surgical intervention. The Health Cluster and WHO worked with Marie Stopes International, Unity State Ministry of Health, Ministry of Health RSS, UNMISS to ensure appropriate immediate surgical intervention including medevac to Bentiu as well the restoration of health services in Mayom where facilities were attacked and looted was done.

Clashes in Manyo during October initiated a surgical response and the Health Cluster coordinated with Medair, Tearfund, and MSF as well as county, state and national Ministry of Health where patients were received in Renk County to respond.

Further clashes throughout the fourth quarter occurred in Northern Jonglei State in Ayod, Canal-Khorfulus, Bor and Akobo. Throughout the Health Cluster and WHO maintained strong coordination with health partners while ensuring that access to health services were available including ensuring prompt surgical treatment through medevacs, provision of supplies and constant surgical mapping. Partners involved
were IMC, COSV, NHDF, MSF, ICRC, IMA, World Vision, and UNICEF.

f) Jonglei Clashes

In December 2011, over 6000 youth were seen moving towards Pibor county, large clashes were anticipated as a cycle of attacks and revenge attacks continued between Lou Nuer and Murle tribes. As such the Health Cluster together with the Ministry of Health managed to mobilize partners in readiness for a large scale response. Together with MSF, IMC, ICRC, Merlin, UNICEF, UNFPA as well as State Ministries of Health in Jonglei, Unity, and Upper Nile and the Ministry of Health surgical mapping and preparedness was conducted by mid December and when clashes ensued from 20th December, the Health Cluster was able to deliver a concrete response.

Clashes initially took place in Lekuangole Pibor County, but continued clashes, possible counter clashes and mass displacement caused injured victims to present in various parts of Pibor County as well as Akobo. Jonglei State was declared a disaster zone by the Government of South Sudan. The number killed at this point was not known but a possible 148, 475 people were at risk affected as populations from both Gumuruk town and Keuangole (over 70,000) had deserted. Health facilities in Lekuangole and Pibor were either completely or partially destroyed. By 3rd January 2012 the Health Cluster in coordination with MSF, UNMISS, UNHAS and the Ministry of Health assisted in the medevac of 222 patients from Pibor County to Juba, Malakal Teaching and Bor Hospitals as well as UNMISS Level 2 Hospital. Medical escorts were provided by WHO, Ministry of Health, MSF and UNMISS; response in the hospitals were supported by WHO and ICRC. Cross cluster support with the protection cluster and child protection cluster was initiated to ensure the well being and repatriation of transferred patients and vulnerable people.

g) Returnees

The influx of returnees into South Sudan continued through the fourth quarter mainly through organized movements by the Republic of South Sudan with assistance from the Emergency Returns Sector led by IOM and UNHCR. Returnees arrived by train from Khartoum and Kosti in Northern Bahr el Ghazal and Western Bahr el Ghazal and by barge to Juba Central Equatoria. Onward assistance movements of stranded returnees from Renk to Juba also occurred in December. As such, the Health Cluster mobilized partners in multiple states to ensure medical screening, referral as necessary and immunizations upon arrival for all returnees. Together with the Northern Bahr el Ghazal, Western Bahr el Ghazal, Central Equatoria State Ministries of Health, WHO, IOM and RRC and health partners MSF coordinated to ensure adequate response.

h) CAP 2012

Through careful analysis and participatory process, the Health Cluster and partners developed the CAP 2012 to define the humanitarian context, needs and strategy for the
forthcoming year. It was acknowledged that the approaching transition in funding of health services, existent fragile health system concurrent with the multiple humanitarian issues being faced across the country could result in large humanitarian needs. The strategic objectives of the CAP 2012 are thus to maintain a basic safety net of health service delivery, as well as enhancing emergency preparedness and response measures. A total of $100,498,400 has thus been requested.

2.3 Communicable Disease Surveillance and Response

Emerging and re-emerging communicable diseases remained a major public health concern in South Sudan, with the country experiencing recurrent outbreaks in the past few years. During this quarter, increased population displacement and influx of returnees and refugees in South Sudan increased the risk of major epidemics caused due to lack of safe drinking water, poor sanitation and hygiene, overcrowding, malnutrition, inadequate vaccination coverage and low immunity to vaccine preventable diseases. Thus the risk of outbreaks due to epidemic prone diseases increased, in South Sudan in 2011. The outbreaks reported included measles, kala azar, cutaneous anthrax, hepatitis E and chicken pox.

WHO South Sudan supported the health authorities and partners in the implementation and expansion of integrated disease surveillance and response strategy with the aim of maintaining an integrated nationwide surveillance system to accurately detect, verify and timely report for any outbreak alerts. South Sudan made significant progress in expanding the coverage of integrated disease surveillance in all ten states and 75% of counties. The overall surveillance capacity for states and counties improved during this reporting period in all the states with 75% of counties having appointed a fulltime surveillance officer. All the ten states trained rapid response teams with the capacity to undertake outbreak investigation and response.

During this quarter, the programme conducted activities aimed at strengthening coordination and technical missions, among them;

1. Hired two consultants to conduct an IDSR mid-term evaluation exercise together with two other consultants recruited by USAID, this was followed by one day debriefing workshop held at WHO conference room. The evaluation team outlined the findings of the mid-term evaluations and recommendations to address the identified gaps. USAID, WHO and MoH-RSS representatives reviewed the draft evaluation reports and shared their comments with the evaluation team. The overall purpose of the evaluation was to determine the effectiveness of the IDSR project and provide recommendations for improving impact during the life of the project.

2. The programme also organized monthly or weekly health cluster coordination meetings in all ten states and at the central level during this reporting period. These meetings were chaired by the Ministry of Health, while WHO co-chaired and provided secretariat services. WHO co-chaired and provided secretariat services. Meeting minutes for health cluster meetings that took place in Juba or other state capitals are available for future reference, as a result of the cluster meetings, duplication of efforts was minimised and delivery of health assistance was more coordinated.
3. Health emergency meetings were chaired by the Ministry of Health and co-chaired by WHO were also held in high risk states including Jonglei, Malakal in Upper Nile, and Bentiu in Unity and Kwajok in Warrap states. The purpose of the health emergency meetings was to coordinate all health emergency response activities conducted by health authorities and health partners, while indentifying gaps and action plans to fill the existing gaps or other challenges. Among the health emergency coordination meetings held were; Refugee health emergency coordination in Bentiu and Yida, Refugee health emergency coordination in Maban and Renk and Jonglei humanitarian emergency response coordination meeting in Juba, Bor and Pibor.

2.3.1 Training and Capacity Building

WHO in collaboration with the Ministry of Health, Republic of South Sudan (MoH-RSS) and State Health Ministries (SMoHs) organized a series of in-services trainings in the fourth quarter. The trainings were meant to enhance knowledge and skills of health personnel in integrated disease surveillance, outbreak investigation and response and laboratory diagnosis. The following in-services trainings were conducted at different states or counties:

1. Four county level IDSR trainings were conducted in the following states, in Cueibet county, Lakes state, Akobo county in Jonglei state and (Koch, Leer and Panyijar counties in Unity state. A total of 140 health care workers were trained on the basics of integrated disease surveillance and response strategy.

2. Three state level Rapid Response Team (RRT) trainings were conducted in Yei in Central Equatorial State (CES), Bentiu, Unity state and Kuajok Warrap state. Eighty seven (87) participants including County Surveillance Officers, County Health Managers/Officers, Laboratory Technicians/Technologist, Polio Field Supervisors and other health cadres were trained on outbreak investigation and response.

2.3.2 Communication and Transport for IDSR Activities

During this reporting period, WHO donated motorcycles and communication equipments to Aweil Center County and Agok in Abyei. The equipments were donated with the purpose of strengthening surveillance and reporting performance at county levels. All state rapid response teams were also provided with financial and technical assistance to undertake
prompt outbreak investigations, and regular supervision visits. WHO technical officers actively participated in supportive supervision activities across all the states and counties in collaboration with state and county surveillance officers. As a result, nineteen outbreak rumors were investigated by state rapid response team and only one outbreak of Rubella was confirmed in Western Equatoria State, while the rest were false alarm.

2.3.3 Surveillance and Epidemic Response

i) Health Facility Reporting

As shown in figure 1, the number of health facilities submitting weekly surveillance reports to the central level gradually increased during this reporting period as compared to the same period in 2010. During the third quarter, an average of 578 out of the 993 (58%) health facilities transmitted weekly disease surveillance reports to the state and central levels. The reporting performance of the states or counties varied, with Lakes, WES, CES, NBGS and Warrap states had the best reporting performance, while Upper Nile and Jonglei performed poorly.

Figure 1: Comparison of number of Health Facilities Submitting the Weekly Surveillance Reports to the Central Level by Month in South Sudan (2010 Vs 2011)

Figure 2 shows the proportion of how facility reporting gradually increased from January to December 2011. The gradual increase in reporting can be attributed to the improved surveillance capacity at state and county levels, enhanced knowledge and skills of primary health care workers on integrated disease surveillance (through IDSR trainings and supportive supervision visits), and the availability of transport and communication means and reporting tools at state and county levels.

ii) Outbreaks Investigation

Nineteen (19) outbreak rumours/alerts were reported and investigated by state rapid response teams during this reporting period. Of these rumours, only one (Rubella) in WES was confirmed as a true outbreak, while the rest were false alarm. The State Rapid Response Teams undertook all the outbreak investigations within 3 days of notification.

Figure 2: Comparisons of proportion of health facility submitting weekly surveillance reports by Month (January - December 2011)

iii) Laboratory Specimen

Fifty seven (57) biological specimens were transported from the field to reference laboratories in Nairobi through Juba for advance testing and confirmation during this reporting period. Of these specimens, 47 blood specimens for measles confirmation were pending for laboratory analysis due to shortage of measles.
and rubella tests kits at KEMRI in Nairobi, while others were either stool for suspected cholera, CSF for suspected meningitis and blood for suspected viral hemorrhagic fever. No specimen tested positive for any of the suspected diseases during this reporting period.

iv) Acute Watery Diarrhea (AWD)

A total of 58625 cases of AWD with 27 deaths were recorded across South Sudan in during this reporting period. There were no cases of suspected cholera reported from any health facility or community in this quarter. As shown in figure 3, the number of AWD cases increased overtime compared to the same period in 2010. The rate of AWD differs by age group, with the highest rate seen in patients less than 5 years of age group (56.4%). As shown in Figure 4, the number of AWD reported during this reporting period varied significantly from one state to the other. Eastern Equatoria State (EES) and Western Equatoria State (WES) recorded the highest number of cases followed by Warrap, WBeG and Lakes states. Upper Nile state reported the least AWD cases, it’s however important to note that Upper Nile state also has the lowest surveillance reporting rate. There were no confirmed cholera cases in the past three months (Oct-Dec 2011) and surveillance in IDPs and Refugee camps was enhanced.

v) Meningitis

Only seventeen (17) suspected meningitis cases and nine (9) deaths were reported in the last three months (Oct-Dec) of 2011 from Unity, EES, NBeG, WBeG and Warrap States, but none of these suspected cases tested positive for Neisseria Meningococccal bacteria through Pastorex rapid test or culture. Health authorities and partners are well prepared to respond if there is any meningitis outbreak in the coming months. WHO prepositioned laboratory supplies and drugs to high risk states, and plans to organize for refresher trainings on meningitis surveillance and case management for key health workers from referral health facilities.

vi) Measles.

A total of 235 suspected measles cases were reported with six deaths across South Sudan in this quarter. The number of measles cases reported was very high during this reporting period when compared with the same period last year. This is attributed to the massive influx of the returnees from North Sudan who were taken to their respective areas (states and counties). Of the measles cases reported during this period, 85% were children below five (5) years of age. The highest cases were reported from Rumbek East, Lakes states, Juba and Morobo, CES while others were reported from Rubkona county, Unity, Aweil East, NBeG, and Gogrial East, Warrap. Sporadic cases were also reported.
from other counties across South Sudan. 47 specimens were collected and sent to KEMRI Measles reference laboratory in Nairobi for confirmation.

vii) Suspected Yellow fever

No suspected cases of yellow fever and other types of VHF's were recorded from across South Sudan in this quarter of the project.

viii) Acute Jaundice Syndrome / Hepatitis E Outbreak

Acute Jaundice Syndrome (AJS) is one of the priority disease conditions that is currently included for weekly reporting in the IDSR system. Acute jaundice syndrome is defined as “any person with acute onset of jaundice with or without fever and absence of any precipitating factors”. One of the most common causes of acute jaundice syndrome is viral hepatitis, followed by dengue and yellow fever. South Sudan has experienced a recurrence of hepatitis E outbreak in the past few years, and in this quarter, 53 suspected cases of AJS with six deaths were reported from five states of CES, EES, WBeG, WES and Warrap.

ix) Malaria

A total 330,499 malaria cases with 190 deaths (CFR 0.06%) were reported across South Sudan in the 4th quarter of 2011. The number of malaria cases reported during this period is unusually high compared to the same period of 2010 in which 186,043 cases with 213 deaths; a case CFR of 0.11% were reported, refer to Fig.3 for details.

The increase could be attributed to the increased number of returnees and displaced people that may be non-immune or susceptible for malaria. Despite the increased number of reported cases in this quarter, the case fatality rate (CFR) reduced due to the improved case management resulting from the number of refresher trainings conducted for the primary health care workers proving the services for high risk communities. Malaria remained a major public health problem in South Sudan in this reporting period. Its feared that the number of malaria cases may increasing year after year. Out of the total number of reported cases in the fourth quarter, 44% were children below 5 years of age while 56% were adults. Health authorities at central and state levels in collaboration with WHO and other key partners responded by distributing mosquito nets to all returnees and displaced people. They also dispatched more anti-malaria drugs and rapid diagnostic kits to all health facilieis in high risk areas. More refresher trainings on case management will be planned for in other areas where this was not conducted.
x) **Kala Azar Outbreak**

Kala azar outbreak is still widespread in Northern Jonglei and nearby areas. During the fourth quarter the number of new cases were still on the rise. A total 2477 new kala azar cases with 43 deaths (1.7% case fatality rate) were reported from 25 treatment centers in fourth quarter of the year. As shown figure 7, more kala azar cases were recorded in the 4th quarter as compared to the previous quarters in 2011 but with less relapses and PKDL cases. The treatment centers that reported the highest number of cases included Jiech and Old Fangak in Upper Nile state followed by Leer Juaior, Keew Ayod and Pagil in Norther Jonglei and Upper Nile States. Most deaths were recorded from Malakal, Leer, Juaibor and Jiech.

2.3.4 **Challenges**

- The humanitarian situation in South Sudan continued to evolve, with increased numbers of returnees, internally displaced people and refugees, hence impacting negatively on the health delivery and systems
- Insecurity and inter-tribal clashes in Jonglei, Upper Nile, Unity, South Kordofan and Blue Nile states which resulted in major displacement and influx of refugees, this negatively impacted on the service delivery.

**2.3.5 Way forward**

1. Together with other actors, support the establishment of a reference laboratory in Juba.
2. Expand the storage capacity of drug stores at state and county level so to preposition more medical supplies, especially during the raining season.
3. Continue improving surveillance data management and dissemination.
4. Need for states and counties surveillance officers and WHO technical officers to conduct more supportive supervision visits.
5. Build capacity of more primary health care workers on IDSR to better serve the community. Together with the MoH-RSS, WHO plans to organize two days consultation meeting to discuss findings and recommendations of the mid-term evaluation on IDSR with all state surveillance teams and key partners and donors.
2.4 Polio Eradication Initiative

The polio eradication initiative (PEI) South Sudan has attained great success in the fourth quarter of 2011 having built on the past achievements in the last three quarters. This section of the report outlines the major activities implemented in the fourth quarter (Oct-Dec.) under the PEI programme. During the quarter under review, AFP surveillance indicators were maintained at optimal and satisfactory levels above international standards. The programme continued with contact sample collection and collection of stool samples from healthy community children in silent counties. With the maintenance of the indicators above optimal levels, South Sudan is a few months away to polio free certification status. Chart 1 below shows the performance in AFP surveillance indicators.

Implementation of recommendations of the independent field review for the AFP surveillance system continued throughout this quarter.

a) National Immunization Days

As a measure to strengthen the immunity of the vulnerable population against the polio virus, two rounds of NIDs were conducted with all states achieving the global target of less than 10% missed children as shown in the post campaign evaluation. See tables below.

NIDS results for November and December 2011
b) Routine vaccination

WHO continued to provide support to routine immunization as an effort to achieving the global target of polio eradication. Routine immunization coverage scaled up from 79% to 89% as of December 2011. WHO-PEI program provided technical and financial support to some states to conduct one round of acceleration campaign as a means to boost routine immunization coverage.

Table: 2 showing DPT-3 coverage as of the end of Dec-2011

WHO/EPI also continued to foster close collaboration with other partner agencies to deliver quality health care to South Sudan population. During the period under review, the EPI/PEI team provided technical, financial and logistical support to Jonglei and lakes States to conduct measles follow – up campaign as a response to the measles outbreaks in those states.

In Warrap and Unity states, the PEI teams provided support Abyei Administrative Areas and Unity states to respond to the IDPs situation during the current Abyei and Mayom crises. The state teams in Northern Bahr El Ghazal, and Upper Nile also supported the provision of immunization and medical services to returnees from North Sudan. The human resource situation was also boosted by the renewal of contracts of the field staff as well as the extension of contracts for 16 STOP Team members.

These achievements have put South Sudan in a very good shape as the only country that has interrupted the transmission of the virus among the four countries in the world that had reestablished transmission of the polio virus.

Lessons learnt

1. Building the capacity of health professionals is of paramount importance to strengthening both the PEI and EPI programs.
2. The response to the HoA recommendation concerning surveillance sensitivity induced increase of case detection; hence consistent supportive measures were provided.
3. The comprehensive surveillance review helped to identify the gaps in the surveillance system and actions required to improve on the system.
4. Close monitoring of immunity gap helped in making an informative decision and appropriate use of a mixture of antigens (m-OPV, b-OPV and t-OPV) for SIAs to ensure a balanced protection against all the three forms of WPV.
5. Collaboration between EPI/VPI team and IDSR and establishment of the measles control room resulted in initiation of measles cased – based surveillance system in all the ten states of South Sudan generating reliable data on the measles situation for effective decision making.
6. Appropriate communication and coordination are key elements in creating
constructive environments for immunization services and integrating them within wider public health services, as well as attaining community support.

Challenges

♦ Inaccessibility due to insecurity is a major challenge to the program. Also road access to most areas of the country is not good making it difficult to carry out planned activities.

Way forward

1. WHO EPI/PEI programme will continue to support MOH/RoSS and development partners to strengthen routine immunization activities as the backbone to the polio eradication programme with more emphasis on monitoring and supportive supervision and communication programmes to raise awareness about routine vaccination.

2. WHO will be further working with MOHGOSS to implement polio eradication activities to maintain Southern Sudan’s polio free status, Supplemental immunization activities routine immunization strengthening and strong AFP and other VPDs surveillance.

3. WHO/PEI would collaboration with IDSR strengthen Measles Surveillance System and intensify response mechanisms against the surge of measles outbreaks though implementation of follow up immunization campaigns in the two remaining States (Eastern Equatoria and Western Equatoria.

4. Conduct quarterly desk reviews to monitor sub national surveillance performance and rapidly implement field-level reviews in areas with major performance gaps.

5. WHO will provide continuous support through training to achieve high quality AFP surveillance.

2.4 Guinea Worm Eradication Programme

Being the last quarter of the year, the report has put together all cases of Guinea worm for the year 2011. During the three month period, a total of 48 guinea worm cases were reported from South Sudan compared to 143 in 2010. These cases were reported from 304 endemic villages in South Sudan. These villages represent 5% of the villages under active surveillance (304/5882). Unfortunately, more than 50% of these cases were internal importation in villages under active surveillance

a) Strengthening the National and Regional GWEP coordination:

The WHO Sudan office supported the 2011 Annual Review meeting for the GWEP and the midyear Review meetings conducted in Rumbek and Kapoeta towns. The Annual Review meeting was attending to by the GWEP from Geneva, EMRO, the Carter Center Atlanta and senior government official from the Ministry of Health at the states and central levels, including the Minister of Health in the Government of the Republic of South Sudan. During the meeting the following recommendations were made as areas for further follow up.
b) Proposal for the 2012 Funding for 2012-15 from Bill Gates approved.

The WHO South Sudan guinea worm eradication program wrote a proposal during the quarter in focus and received a funding of $1.52 Million to support the program for the 2012 transmission season. Parts of these funds have already been released to South Sudan.

c) The International certification Committee for Dracunculiasis Eradication

The WHO South Sudan Guinea worm participated in the international certification committee for Dracunculiasis held in Geneva Switzerland in November 2011 given the high number of cases in the country as a result high attention has been given to the country because more than 98% of the global guinea worm cases occur here. Progress made in South Sudan will be closely monitored by the ICDDE team. The Chairman of the ICDDE visited the country in December 2011 and will be making a follow up visit in March 2012.

Way forward

1. Conduct needs to conduct a full assessment of Nakipinakwaak area near Boma and this should be done by April of 2012.
2. Continuously update cattle camp populations/households to better assess intervention activities.
3. Discuss with the water agencies the implications and effectiveness of drilling boreholes and other safe water options in cattle camp areas.
4. Assess the whole of Wuror, Nyrol, Ayod, and Pibor Counties to ascertain if GW is endemic.

♦ The process of transition should be discussed between the SSGWEP, state GW coordinator, and IDSRC co-coordinators and should include: handing over the list of all past endemic villages with record of annual cases, List of field supervisors and the State DGs should be given a copy of the above to ensure that both the Surveillance officers and GW state coordinators are coordinating GW activities at the state.

♦ State and County surveillance officers and SSGWEP should meet monthly to exchange information on rumors’ and confirmed cases, list of priority villages, and villages with GW volunteers and their names. [NB: 2010 Recommendations.

2.5 Human Immune Deficiency Virus (HIV)

WHO is a sub-recipient under Global Fund round 4 HIV grant. At the end of the last quarter of 2011, 3,442 people were receiving antiretroviral therapy in the country, an increase of 174 people, or 5%, from previous the quarter. Ezo in Western Equatorial state had the greatest increase in the number of people receiving
antiretroviral therapy during the last quarter of 2011. This brings the estimated coverage of antiretroviral therapy among adults and children in the country to 6.9% of the 49,500 people eligible for treatment.

Following capacity building activities conducted in the previous quarter on child and infant diagnosis and management, the number of children younger than 15 years of age receiving antiretroviral therapy increased by 20 from the third quarter. About 110 children younger than 15 years were receiving antiretroviral therapy at the end of 2011, with an estimated coverage of 3.7%.

**Capacity building**

In the fourth quarter, WHO team continued providing technical support to scale up the quality HIV treatment services. The HIV team visited Yambio, Ezo, Tambura and Nzara in Western Equatoria State; Bor in Jonglei, Magwi in Eastern Equatoria State (EES) and Wau in Western Bahr el Ghazal state (WBGZ). Through the support supervisory and mentorship visits, the HIV team identified areas of weakness that required corrective measures. To meet the increasing demand of services, WHO continued providing onsite trainings and support the establishment of more facilities in underserved areas of Aweil in Northern Bahr el Ghazal state (NBGZ), Magwi in EES and Renk in Upper Nile state.

**Lessons learnt**

Attrition (discontinuation of antiretroviral therapy) remains a major challenge, data on the proportion of people who remain on antiretroviral therapy showed that the average retention rate of patients at 12 months after initiation of antiretroviral therapy was 62.5% and 55% respectively at 12 and 24 months. WHO plans to support a rapid assessment to explain the reasons for the high attrition.

Clinical mentorship has greatly improved the quality of management of patients with improved commodity and supply management, monitoring & evaluation and reporting. WHO joined UNDP to conduct Onsite Data Verification, a regular audit program at health facilities that provides HIV services funded by Global Fund.

**2.6 Tuberculosis**

During the quarter, WHO South Sudan continued supporting CUAMM (DOCTORS WITH AFRICA) technically and financially to deliver TB services in the Greater Mundri County, Western Equatoria State.

The World Health Organization (WHO) in collaboration with the South Sudan National TB/Leprosy/Buruli Ulcer Control Program (SSNTLBP) conducted a training of health workers on the basic aspects of TB/HIV collaborative activities with a major focus on Co-trimoxazole preventive therapy (CPT). The training was meant to improve the knowledge of the health workers on TB, TB/HIV collaborative activities and Co-trimoxazole prophylaxis. Thirty four health workers (general medical assistants, clinical officers, nurses, counselors and community health workers) trained from Central Equatoria State (17) and Western
Equatoria State (17) benefited from this training. The training was conducted for 5 days in Yei, Central Equatoria State and Yambio, Western Equatoria State.

Twenty eight health workers including general medical assistants, clinical officers, nurses, laboratory personnel, data clerk and statisticians from Eastern Equatoria State (12) and Western Bahr el Ghazal State (16) were trained on health management information system (HMIS). The training aimed at improving knowledge of the health workers in completing accurate records in tools and basic analysis of reports and monitoring and evaluation. The 5 days training was conducted in Torit, Eastern Equatoria State and in Wau, Western Bahr el Ghazal State The Programme also provided technical assistance (TA) through the Regional Office (EMRO) to support the development of TB Round 11 proposal, and review the TA needed by the National TB Control Program as well as the role of WHO in providing the needed assistance.

2.7 Health Systems Development

The health systems development programme implements activities that address the WHO strategic objectives 10 and 11. This report outlines the key achievements during the fourth quarter.

a) Human Resources for Health

Through support from the Global Health Work Force Alliance [GHWA], World Health Organization [WHO], conducted several activities aimed at improving the coordination of Human Resources for Health [HRH] interventions, building the capacity of the HRH committee and development of a HRH policy and strategy. Activities conducted include;

b) Coordination of HRH actions

A regional consultant from the GHWA supported the expansion of the existing HRH Committee, based on the Country Coordination and Facilitation [CCF] membership principles, by conducting a stakeholder analysis. Whilst this process was helpful in identifying additional members of the committee, a comprehensive analysis of their influence over HRH issues in the country and how this should be harnessed to foster coordination is work in progress.

WHO continued to support and collaborate with the Ministry of Health Focal Point [MOH FP] for HRH and the HRH committee secretariat [JICA] to convene and proactively participate in the monthly HRH technical working group [TWG] meetings. A total of 3 HRH TWG meetings were conducted in each month of the quarter. However, representation of all stakeholders especially the additionally identified based on the CCF approach was still a challenge that will be addressed progressively.

c) Capacity Building on HRH

The GHWA regional consultant conducted a workshop that primarily oriented participants on the importance of HRH in the health system, basic skills and the need for continuous advocacy for HRH. Besides HRH committee members, participants were drawn from all the 10 States MoH as well as some training institutions. Although participants acquired basic knowledge on the importance of HRH in the health system, it should be noted that capacity building is a continuous process and shall therefore be carried out in subsequent months with more efforts focusing on consolidating the skills and competences of the HRH committee members.
d) Development of the HRH Policy and Strategy

Through support from the GHWA regional consultant, the process to review and revise the current HRH policy and strategic plan was initiated. In collaboration with the HRH committee secretariat and WHO a HRH situation analysis, through the desk review of existing HRH documents and reports was conducted, followed by a workshop to dialogue on the report and finalize the development of the new HRH policy and strategic plan was conducted under the guidance of the GHWA consultant. Unlike the desk review process that had limited participation of some HRH committee members, this workshop was not only well attended but fostered broader participatory discourse that came up with critical actions for the new HRH policy and strategic plan. Participants for this workshop were drawn from the central and state MOH’s, members of the HRH committee and training institutions. A report from this workshop is expected to input into the draft HRH policy and strategic plan that will be validated during the next quarter.

e) Leadership and Governance

During this quarter, WHO continued to participate in and conduct activities that contributed to strengthening of leadership and governance in the health sector, the activities conducted include;

f) Donor Coordination and collaboration

WHO, participated in the monthly MoH and Health Sector Development Partners [HDPs] meetings convened by the central MoH directorate of planning and donor coordination. This forum fosters coordination among the partners through information sharing and dialogue to key policy issues that impact on the performance of health sector. One of the MOH/HDPs meetings was dedicated to dialogue on options for supporting the implementation of the Health Sector Development Plan.

Monthly meetings to enhance coordination and collaboration among the lead UN agencies active in the health sector [UNICEF, UNFPA & WHO], and chaired by the Head of Office were carried out especially to develop a common UN strategy for addressing Maternal and Child health challenges in the country. These meetings involved the head’s of agencies and technocrats from the three UN agencies. Ultimately a common UN strategy based on the comparative advantage of each of these agencies aimed at supporting South Sudan’s Reproductive Health strategy will be developed. The three agencies have also agreed to support the development of the Marginal Budgeting of Bottlenecks to address Child Health in South Sudan. The current members will be joined by the World Bank and UNAIDs as of January 2012.
g) Development of Policies and Strategies

WHO in collaboration with a working group comprising representation from DFID, USAID, JDT, ODI and NGO’s representative supported the review and finalization of the Health Sector Development Plan 2012-2016. This document provides the overall framework for service delivery and investments in the health sector in South Sudan over the next five years.

h) Secondary Health Care

With support from CIDA, WHO continued carrying out activities to strengthen Emergency Obstetric and Neonatal Care [CEmONC] in Bor hospital, Jonglei State. The main activities conducted during this quarter included: provision of technical support and capacity building for CEmONC, strengthening management at the hospital, infrastructural improvements and provision of essential health commodities for CEmONC.

i) Technical support and capacity building

Besides extending the stay of the Anesthesiologist, WHO deployed an Obstetrician and Gynecologist, and a Midwifery trainer in Bor hospital to provide both technical support in the provision of and train medical personnel on CEmONC. This team of experts conducted a baseline assessment of the level of knowledge on CEmONC among medical officers and midwives in the hospital as a premise to inform the training needs, design and content for training. Subsequently through didactic instructions, coaching and mentoring, continuous professional development[CPD] sessions for the medical officers and midwives was initiated on key CEmONC topics such as; The concept of Emergency Obstetric and Neonatal care and the United Nations signal functions; Rapid initial assessment of a critically ill mother; Maternal mortality, its major causes; Eclampsia and pre-eclampsia; Ante-partum and post-partum Hemorrhage; Use of a partograph; Obstructed labor and ruptured uterus; Management of shock; Active management of the third stage of labor; Apgar scoring; Operative care. As part of the process of consolidating skills and competences of the medical staff on CEmONC in Bor hospital, these CPD sessions shall be conducted through the entire project lifespan and ultimately integrated into the hospitals best practice.

In a bid to understand the challenges that mothers experience in utilizing antenatal care [ANC], the team engaged several mothers in focus group discussions [FGD]. Key challenges revealed by mothers, that the team intends to address include but are not limited to; long distances and poor roads to the hospital; excessive time spent at ANC clinics; inability to afford out of pocket expenditures for the file and delivery at the hospital; culture belief that encourages first delivery to be conducted by one’s mother. Addressing these challenges will require a concerted effort of state MoH as well as communities and their local leaders.

j) Strengthening Management Practices for CEmONC at the Hospital

In collaboration with the hospital administration, weekly review and monthly ward meetings have been introduced in the Maternity ward. These will progressively be
introduced to other wards. To improve data capturing and utilization for planning activities in the ward, a new monthly summary for maternity services was introduced. As best practice for strengthening accountability, a maternal mortality audit committee was formed comprising of; the hospital director, the patron, medical officer in-charge of maternity, the sister in-charge of maternity and 2 ex-officio members; the WHO technical officer CEmONC and 1 staff on duty during the time of the maternal/neonatal death. One maternal mortality review meeting was conducted in the fourth quarter.

**k) Infrastructural Improvement**

During this quarter, a contractor for the construction of a Maternity ward was identified and His Excellency the Governor of Jonglei state lead a team of dignitaries from the central and state MoHs as well as the WHO head of office to commission the construction of the ward. Completion of works is expected by end of March 2012.

**1) Support to the provision CEmONC services**

Besides building the capacity of the medical staff in the hospital, the team of experts deployed by WHO continued to support the team in actual provision of services to the clients. The range of maternal health services provided in Bor hospital during the quarter is outlined in table 1.

**Table 1: Maternal Health Services**

<table>
<thead>
<tr>
<th>Month</th>
<th>ANC attendance</th>
<th>Total deliveries</th>
<th>Vaginal deliveries</th>
<th>Caesarean sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>551</td>
<td>59</td>
<td>50</td>
<td>09</td>
</tr>
<tr>
<td>November</td>
<td>791</td>
<td>78</td>
<td>75</td>
<td>03</td>
</tr>
<tr>
<td>December</td>
<td>509</td>
<td>87</td>
<td>78</td>
<td>09</td>
</tr>
</tbody>
</table>

Generally there has been an increase in the ANC utilization and subsequent deliveries in the hospital, except for the decline in ANC attendance in December which is attributed to absence of the UNFPA UNV midwife who is usually active as well as; omission of 2 days of ANC during the festive season. Specific cases of CEmOC are outlined below

**Table 2 shows the CEmOC cases**

<table>
<thead>
<tr>
<th>Month</th>
<th>Maternal mortality</th>
<th>Neonatal mortality</th>
<th>Puerperal Sepsis</th>
<th>Caesarean sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>November</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>December</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>

As shown above, the maternal and neonatal mortality rates, puerperal and neonatal sepsis generally decreased in this quarter while the caesarean section rates increased as expected in the project objectives. However, two neonatal sepsis cases in the month of December were home deliveries which came and died within 12 hours of admission in this hospital.

**2.9 APOC PROGRAMME:**

The African Programme for Onchocerciasis Control (APOC) continued to support the South Sudan Onchocerciasis Taskforce (SSOTF) in the bid to establish effective and self-sustainable community-directed ivermectin treatment (CDTI) throughout the onchocerciasis endemic areas in 9 out of 10 states in South Sudan during this quarter. The CDTI strategy relied on community participation for the distribution of ivermectin to the targeted population. Project
Coordinating Officers, County OV Supervisors, Staffs from Front Line Health Facilities (FLHF) facilitated the CDTI process by organizing communities to participate in CDTI activities. Community selected Community Drug Distributors (CDDs) who were trained conducted community censuses, provided treatment with ivermectin and kept records of the households treated.

At project level, the main activities carried out included: completion of the distribution of mectizan and work support items to all the payams and bomas in the CDTI project areas stepping up mass distribution exercise of mectizan in the communities and completion of the mass distribution exercise in some communities, compilation of training and mass treatment data at all levels of CDTI project implementation and commencement of receipt of training and mass treatment data from the field to the National Task Force Secretariat was also done.

a) Field visit to West Bahr El Ghazal and Equatoria States CDTI project.

A field visit was conducted to East Bahr El Ghazal CDTI Project in the month of October 2011. The visit was meant to: monitor the progress of implementation of CDTI project activities; provide supportive supervision to the project and frontline health facility staff; conduct advocacy meetings with State and County Health authorities on CDTI project activities and to conduct community visits to meet with community members and leaders. During this time, the programme met with Director Administration for Lakes State and with County Health Officers of the Rumbek East and Cuiebet counties and held discussions on ways of improving implementation of CDTI activities in the State. During the Community visit, CDTI data was verified against the records of the Community Drug Distributors and also had discussions with communities on how to improve their involvement in CDTI work.

b) Audit exercise

A team from the APOC Headquarters and the APOC Finance/Admin Officer based in Juba were involved in an audit exercise of the funds given to support Onchocerciasis Control activities in South Sudan. The exercise involved the certification of the books of accounts from 2008 to 2010 conducted in November.

c) Training of Project Officers and Accounting staff.

Project Officers and Accounting staff were trained on the new financial reporting procedures. During the training, one day was devoted to the technical aspects of the project; and on technical aspects of implementation and reporting of CDTI was discussed. The key issues stressed were the need to have accurate TCC reports and community data that are truly reflective of what is happening in the CDTI communities. Going forward, the project will be expected to directly submit their technical and financial reports to APOC headquarters without first going through the national office and this training was a first of a series of activities that is preparing the projects for this new development.
d) Community visit to Juba County.

Community visits to Juba County were conducted in collaboration with the National Coordinator and the Project Coordinator for East Equatoria CDTI project that oversees activities in Juba County. The visit was aimed at having meetings with communities on CDTI activities, and conducting discussions with community members on how best to improve the implementation of CDTI activities. It is anticipated that more community interaction with the CDTI staff, will improve the implementation of the community directed treatment in Juba County.

Challenges

1. Insecurity incidences were reported in the states bordering North Sudan, this affected plans to visit Wau and Warrap states in West Bahr El Ghazal CDTI as a result not visiting Warrap and WBGZS) the programme visited the CDTI project in East Equatoria and day trips were conducted out of Juba to Communities in Juba County.

2. The South Sudan Onchocerciasis Task Force (SSOTF) is still thin in regards to composition and capacity to effectively perform its roles. This leads to inadequate oversight over the project activities at State level.

3. The CDTI strategy is not evenly embraced across the CDTI project areas, this leads to inconsistencies between projects. Continuous training has to be repeatedly done for both the new and old staff.

4. Management of project resources (vehicles, motorcycles, equipment, work support items), monitoring their use and maintenance is still a challenge. Their dysfunction leads to negative impact to project outputs.

Way forward

1. Prepare the 2012 mectizan application and having it submitted to MERCK by the end of January 2012.

2. Receipt of all the 2011 training and treatment data and compiling it in preparation for TCC annual reporting.

3. Continued technical support to the SSOTF and the CDTI project staff.

2.10 Health promotion and prevention and, advocacy and communication

During the fourth quarter, WHO supported the MoH, department of health promotion and education at the central and state levels to build the capacity of the local community leaders including religious leaders, clan leaders, social mobilizes and the state health department personal with communication skills and planning during emergency or crises.
Over 130 community workers. Religious leaders, traditional leaders and social mobilizers were trained. The participants developed communication action plans and budgets that can be used during any emergency or crisis in their respective counties.

WHO in collaboration with other partners (American Refugee Council (ARC), PSI, Save the Children, Malaria Consortium, UNICEF, and Health Net) supporting the health education and promotion department of the ministry of health with messages development and design for print and broadcast media. These were later broadcast in various radio stations across the country.

The organization in collaboration with UNICEF and MSH supported the MoH Republic of South Sudan to develop and print IEC materials (posters, brochures, t-shirts and caps) used during the National Immunization Days (NIDs).

2.11 Mental Health.

WHO includes mental well being in its definition of health, “a state of complete physical, mental and social well being and not merely the absence of disease or infirmity”. Evidence is emerging that positive mental health is associated with good physical health, meaningful long-term relationships, a sense of belonging, good education and being employed in a healthy working environment. On the other hand, social disadvantages increase the risk of mental, neurological and substance use (MNS) disorders in all societies, irrespective of wealth of the country.

Given that South Sudan has just emerged from a long civil war, it is likely that many of its people have under through Post Stress Traumatic Disorder. To help the ministry of health strengthen its mental health department to address problems related to mental, WHO supported the ministry of Health Republic of South Sudan to develop Mental Health strategy
document will be used to improve mental health services in the country as a way of strengthening it.

2.12 Environmental Health

The Republic of South Sudan experiences a wide of environmental problems, such soil degradation due to the widespread deforestation with consequent loss of biodiversity and wildlife habitats, pollution of rivers and the environmental due to oil drilling in the wetlands, over exploration of fisheries, and conflicts over diminishing resources such as rangelands and water points for livestock. Other environmental factors that directly impact on health are, the increase and prevalence of environment-related diseases such as malaria, typhoid and watery diarrheal diseases due to the widespread water contamination by urban surface runoff and poor environmental sanitation. This results from inadequate disposal of both solid and liquid wastes on open ground.

In this quarter, WHO supported the MoH-RSS to come up with a draft Environmental Health Policy for South Sudan. The draft is currently for discussion and shall be widely disseminated and put to use once finalized.

5.0 Conclusion

The health situation across South Sudan remains fragile characterized by poor infrastructure, drug stock-outs and lack of medical equipment, poor staffing and staff absenteeism) and poor health funding especially at the state level further compounds the problem.

The problem is further escalated by the deteriorating humanitarian situation in the country coupled with the high influx of returnees and displacement from Abyei and other areas. The returnees living in the transit camps have also increased the risk of disease outbreaks. In addition low reporting rate from the health facilities due to long standing unpaid salaries and mobile population groups. (especially pastoralists) all contribute to poor health indicators.

WHO will continue to invest her efforts in strengthening the governmental health system in South Sudan by providing technical support to the states and counties to implement life saving health interventions, improve the accessibility and utilization of services while continuing to offer technical support to the state health teams in emergency health planning, response, monitoring, supervision and coordination and, advocating for more support and attention to the states.

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